



STIC Search Report

EIC 3700

STIC Database Tracking Number: 95303

TO: Linda Sholl
Location: pk1 5d24
Art Unit: 3700
Thursday, May 29, 2003

Case Serial Number: 10/004151

From: Terry Solomon
Location: EIC 3700
CP2-2C08
Phone: 305-5932

Terrance.solomon@uspto.gov

Search Notes

No cases found.

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UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5975892

November 2, 1999

Pneumatic flash calciner thermally insulated in feed storage silo

REISSUE: November 2, 2001 - Reissue Application filed Ex. Gp.: 3749; Re. S.N. 10/004,151 (O.G. April 22, 2003)

APPL-NO: 199908 (09)

FILED-DATE: November 25, 1998

GRANTED-DATE: November 2, 1999

Selected file: PLUSPAT

** SS 1: Results 1

1 / 1 PLUSPAT - @QUESTEL-ORBIT
PN - US5975892 A 19991102 [US5975892]
TI - (A) Pneumatic flash calciner thermally insulated in feed storage silo
IN - (A) JONES MICHAEL ANDREW (US)
AP - US19990898 19981125 [1998US-0199908]
PR - US19990898 19981125 [1998US-0199908]
IC - (A) F27B-015/00
EC - C04B-002/10
F27B-015/00
PCL - ORIGINAL (O) : 432058000; CROSS-REFERENCE (X) : 432014000
432106000
DT - Basic
CT - US3862294; US4118177; US4483831; US4747773; US4932862; US5132102;
US5174749; US5260041
STG - (A) United States patent
AB - A self-contained calcination plant is enclosed in a feed-storage silo. The plant consists of a vertical reactor, a separation cyclone and a pair of heat exchangers connected by appropriate piping and immersed in the feed material stored in powdery form in the silo. A positive displacement blower creates an air stream that is preheated in one of the heat exchangers and fed in part to a gas burner and in part to a feed pipe at the bottom of the reactor. The feed material is kept in a fluidized state in the silo by air heated in the other heat exchanger and blown upward from the bottom of the storage compartment, from where the material is dropped into the feed pipe through rotary valves prior to injection into the reactor. The feed pipe is connected tangentially to the reactor so as to produce an upward swirling flow around the burner's flame. The fluidized reaction products are passed through a cyclone to separate the calcined oxides from the hot gases, which are then fed serially through the heat exchangers to preheat the process air used for the blower and the storage compartment. The solid product is recovered from the bottom of the cyclone. The entire plant is enclosed in the silo and, during operation, all units are immersed in the fluidized hot feed material that provides excellent heat transfer among all components and a sufficiently uniform temperature in the reactor to produce optimal calcination.

1 / 1 LGST - @LEGSTAT
PN - US 5975892 [US5975892]
AP - US 199908/98 19981125 [1998US-0199908]
DT - US-P
ACT - 19981125 US/AE-A
APPLICATION DATA (PATENT)
US 199908/98 19981125 [1998US-0199908]

19991102 US/A
PATENT

20030422 US/RF
REISSUE APPLICATION FILED
20011102
UP - 2003-18

1 / 1 CRXX - @CLAIMS/RRX
PN - 5,975,892 A 19991102 [US5975892]
PA - Jones, Michael Andrew
ACT - 20020730 REASSIGNED
ASSIGNMENT OF ASSIGNORS INTEREST

Assignor: JONES, MICHAEL A. DATE SIGNED: 07/15/2002

Assignee: PNEUMATIC PROCESSING TECHNOLOGIES, INC. 725 W. 700 SOUTH
MANTI UTAH 84642

Reel 013138/Frame 0527

Contact: DURANDO BIRDWELL & JANKE, PLC ANTONIO R. DURANDO 2929 E.
BROADWAY BLVD. TUCSON, AZ 85716

20021102 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20030422
REISSUE REQUEST NUMBER: 10/004151
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3749

Reissue Patent Number:

Selected file: INPADOC

**** SS 1: Results 1**

1 / 1 INPADOC - @INPADOC
PN - US 5975892 A 19991102 [US5975892]
TI - PNEUMATIC FLASH CALCINER THERMALLY INSULATED IN FEED STORAGE SILO
IN - JONES MICHAEL ANDREW [US]
PA - JONES MICHAEL ANDREW [US]
AP - US 199908/98-A 19981125 [1998US-0199908]
PR - US 199908/98-A 19981125 [1998US-0199908]
IC - F27B-015/00

1 / 1 LEGALI - @LEGSTAT
PN - US 5975892 [US5975892]
AP - US 199908/98 19981125 [1998US-0199908]
DT - US-P
ACTE- 19981125 US/AE-A
APPLICATION DATA (PATENT)
US 199908/98 19981125 [1998US-0199908]

19991102 US/A
PATENT

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REISSUE APPLICATION FILED
20011102

UP - 2003-18

Session finished: 29 MAY 2003 Time 17:41:20

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*lit search for
5,975,892
Reissue 10/004/51*

1 of 1 DOCUMENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5975892
November 2, 1999

Pneumatic flash calciner thermally insulated in feed storage
silo

APPL-NO: 00199908

FILED-DATE: November 25, 1998

GRANTED-DATE: November 2, 1999

Selected file: PLUSPAT

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ACT - 19981125 US/AE-A
APPLICATION DATA (PATENT)
US 199908/98 19981125 [1998US-0199908]
19991102 US/A
PATENT
UP - 1999-48

Selected file: INPADOC

**** SS 1: Results 1**

1 / 1 INPADOC - @INPADOC
PN - US 5975892 A 19991102 [US5975892]
TI - PNEUMATIC FLASH CALCINER THERMALLY INSULATED IN FEED STORAGE SILO
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PA - JONES MICHAEL ANDREW [US]
AP - US 199908/98-A 19981125 [1998US-0199908]
PR - US 199908/98-A 19981125 [1998US-0199908]
IC - F27B-015/00

1 / 1 LEGALI - @LEGSTAT
PN - US 5975892 [US5975892]
AP - US 199908/98 19981125 [1998US-0199908]
DT - US-P
ACTE - 19981125 US/AE-A
APPLICATION DATA (PATENT)
US 199908/98 19981125 [1998US-0199908]

19991102 US/A
PATENT
UP - 1999-48

Session finished: 08 JUL 2002 Time 18:36:00